

CLAIMS

What is claimed is:

1. A method for use with a rotating storage device, said rotating storage device comprising a storage medium driven to rotate, a head for reading and writing data on said storage medium, and a ramped loading mechanism on which said head is stored, said method comprising the steps of:

loading said head from said ramped loading mechanism onto said storage medium;

reading location information stored in said storage medium via said head; and

retaining a location of said head for a predetermined period above a track of a region other than a valid storage region of said storage medium after successfully reading said location information.

2. The method according to the claim 1, wherein said track is positioned so that an air bearing surface (ABS) of said head does not hang over said valid storage area.

3. The method according to the claim 2, wherein said control method further comprises the steps of:

moving said head to an inside of said storage medium; and

moving said head to the outside of said storage medium;

5 such that a speed of moving to the outside of said head is greater than the speed
6 of moving to the inside.

1 4. The method according to the claim 1, wherein a combination of said step for
2 moving to the inside said step of moving to the outside is repeated for several times.

1 5. A control method for the rotating storage device, said rotating storage device
2 comprising a storage medium driven to rotate and a read/write head for information on
3 said storage medium, said control method comprising the steps of:

4 performing writing action to write information to said storage medium;

5 referencing to a defect list stored in a storage area provided in elsewhere of said
6 rotating storage device to judge whether the track having the sector into which said write
7 has been done or an adjacent track or a nearby track of said track contains a defect; and

8 verifying said write if the result of said judgment is true.

1 6. A control method for a rotating storage device comprising a storage medium
2 driven to rotate and a read/write head for information on said storage medium; said
3 control method comprising steps of;

4 performing writing action to write information to said storage medium;

5 reading a gain value or an amplitude value of an automatic gain circuit for
6 amplifying a signal via said head;

7 calculating dispersion of said signal from said head using said gain value or said
8 amplitude value;

determining whether a predetermined threshold value is exceeded by comparing a measured value stored in the dispersion table recorded in elsewhere of said storage region in said rotating storage device and a dispersion value obtained from said calculation; and

verifying said write when the result of said judgment is true.

7. A control method for a rotating storage device comprising a storage medium driven to rotate and read/write head for information on said storage medium, said control method comprising the steps of;

performing writing action to write information to said storage medium;

determining whether said write operation is done within a certain period starting from immediately after loading said head on said storage medium or within a time required for processing a predetermined number of commands; and

verifying said write when a result of said determination is true.

8. A rotating storage device comprising:

a head to read and write information on said storage medium;

a ramped loading mechanism for loading said head on said storage medium and for retaining said head;

5 means for reading position information stored in said storage medium through
6 said head and for controlling a relative location to said storage medium of said head; and

7 means for retaining a position of said head above a track of an area other than a
8 valid storage area on said storage medium for a certain period.

1 9. The rotating storage device according to the claim 8 wherein said track is
2 positioned so that an air bearing surface (ABS) does not hang over said valid storage
3 area.

1 10. The rotating storage device according to the claim 9, wherein said rotating storage
2 device further comprising;

3 means for moving said head to the inside of said storage medium;

4 means moving said head to the outside of said storage medium at a greater speed
5 than that of moving said head to inside and;

6 means for repeating said moving to the inside and outside.

1 11. A rotating storage device comprising:

2 a storage medium driven to rotate;

3 a read/write head for information on said storage medium, a means to read
4 information onto said storage medium;

5 a defect list storing defective sector information;

6 means for determining whether said defective sector is contained in a track
7 containing a sector on which said write has been done or a track adjacent to or nearby
8 said track by referencing to said defect list; and

9 means for verifying said write when a result of said judgment is true.

1 12. A rotating storage device comprising:

2 a storage medium driven to rotate;

3 a read/write head for information on said storage medium; means for writing
4 information onto said storage medium; means for reading amplitude information of a
5 gain value of an automatic gain circuit for amplifying a signal via said head or an
6 amplitude value of said signal;

7 means for calculating dispersion of a signal of said head from multiple said gain
8 values or amplitude value;

9 a dispersion table containing dispersions of signals on said head individually
10 stored in divided areas on said storage medium;

11 means to judge whether a predetermined threshold value is exceeded by
12 comparing a value in said dispersion table and a dispersion value obtained by said
13 calculation; and

14 means to verify said write when a result of said judgment is true.

1 13. A rotating storage device comprising: